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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,088

03/31/2004

Schang-Jing Hon

MR2349-1004

5660

4586

7590

02/27/2006

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER

DONG, DALEI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,088

Applicant(s)

HON ET AL.

Examiner

Dalei Dong

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/18/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6, 7 and 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "said structure" in line 2 of claim 6. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination the Examiner interprets the "said structure" as the LED.

Claim 9 recites the limitation "said structure" in lines 3-4 of claim 9. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination the Examiner interprets the "said structure" as the emitting device unit.

Claim 14 recites the limitation "said structure" in lines 2 of claim 14. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination the Examiner interprets the "said structure" as the emitting device unit.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,653,661 to Okazaki.

Regarding to claim 1, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, a replaceable LED package assembly, comprising: a terminal set (3a and 3b) comprising a first terminal (3b) and a second terminal (3a) functioning as anode and cathode, respectively; a reflective cup (26) installed on the terminal set (3a and 3b); at least one light emitting diode (LED) chip (1) installed on the reflective cup (26) and electrically connected with the terminal set (3a and 3b); and a fluorescent unit (8) installed on the LED chip and apart from the LED chip, the fluorescent unit (8) being made of transparent material (light transmissive resin see column 4, lines 19-21).

Regarding to claim 2, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the reflective cup (26) is made of light-reflecting metal material (see column lines 14-17).

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Regarding to claim 3, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is a fluorescent material.

Regarding to claim 4, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is coated with fluorescent material on a surface portion thereof.

Regarding to claim 5, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is either hollow or solid (after curing the light transmissive resin with the fluorescent material, see column 4, lines 19-21).

Regarding to claim 6, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is combined with the structure (the Examiner interprets the structure as the LED) using a replaceable technique (using light transmissive epoxy resin 7) of combination is merely a method of manufacturing of the LED package assembly. Please note that the claimed method steps are product by process limitations. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of product. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an obvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding to claim 7, the limitation of the replaceable technique is bonding with glue (light transmissive epoxy resin 7). The limitation of welding with an RF heating source, or assembling with tenon structure is merely a method of manufacturing a structure. Please note that the claimed method steps are product by process limitations. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of product. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an obvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding to claim 8, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the LED chip (1) is embedded firmly using a packaging glue (7).

Regarding to claim 9, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, a replaceable LED package assembly, comprising: an emitting device unit (1) including one or a plurality of LED chips (1); and a fluorescent unit (8) made of transparent material (light transmissive resin see column 4, lines 19-21) and combined with the structure using a replaceable technique of combination.

Regarding to claim 10, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is made of transparent material (light transmissive resin see column 4, lines 19-21).

Regarding to claim 11, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is a fluorescent material.

Regarding to claim 12, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is coated with fluorescent material on a surface portion thereof.

Regarding to claim 13, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the fluorescent unit (8) is either hollow or solid (after curing the light transmissive resin with the fluorescent material, see column 4, lines 19-21).

Regarding to claim 14, Okazaki discloses in Figures 3, 7, 11, 13, 15, 17, the LED chip connects with a circuit (power source) outside the structure of the replaceable LED package.

Regarding to claim 15, the limitation of the replaceable technique is bonding with glue (light transmissive epoxy resin 7). The limitation of welding with an RF heating source, or assembling with tenon structure is merely a method of manufacturing a structure. Please note that the claimed method steps are product by process limitations. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of product. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an obvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following prior art are cited to further show the state of the art of composition of a replaceable LED package assembly.

U.S. Patent No. 6,294,800 to Duggal.

U.S. Patent No. 6,614,170 to Wang.

U.S. Patent No. 6,982,523 to Odaki.

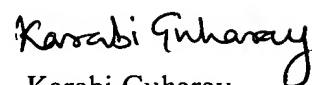
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


D.D.

February 13, 2006


Karabi Guharay
Primary Examiner
Art Unit 2879